# Grande Fleur-eo

Refrigerated Heating Circulator with water-cooled refrigerating unit. Powerful, variable speed pump, housing of stainless steel, CFC and H-CFC free. Speed controlled pump (soft start), pump pressure control.
With adjustable overtemperature protection according to DIN 12876.

Pilot ONE:
The Pilot ONE controller with pioneering technology and advanced control functions brings numerous advantages to routine work. The extensive features list includes a brilliant 5,7“ TFT touchscreen display, USB and network connections, an integrated technical glossary and language support in 13 languages (EN, DE, FR, IT, ES, RU, ZH, PT, JA, CS, PL, KO, TR). The Pilot ONE has a convenient navigation system with easily remembered icons and menu categories which are colour sorted to make routine work simpler. Thanks to a favourites menu and One-Click operator guidance all important information is always just a few keystrokes away. Software wizards also help you to set up, ensuring correct settings. The USB port allows connection of the system to a PC or notebook. Together with the Spy software, requirements such as remote control or data transmission are easily achieved in a cost-effective manner. Network integration is easy with the internet port.

Further functions:
E-grade Professional installed as standard, TAC (True Adaptive Control) - self optimising internal and cascade control, selectable temperature control mode (Internal/Process), programmer with 10 programs (max. 100 steps), ramp function (linear and non-linear), 5 point calibration, scalable graphic display, favourites menu, display resolution 0,01 K, integrated technical glossary, 2nd set point, user menus (Administrator level), calendar start, wallpaper selection.

4-year warranty - registration required.

The dimensions specified below are approximate and may be subject to change.

Please note:
The machine is developed exclusively for external open operation, and does not possess an expansion tank. The filling of the thermofluid, and allowance for the temperature dependent volume changes is only possible via an externally connected application.

**Technical data according to DIN 12876**

| | |
|---|---|
| Operating temperature range | -40...200 °C |
| Temperature stability at -10°C | 0,01 K |
| temperature set point / display | 5,7" colour Touchscreen |
| Resolution of display | 0,01 K |
| Internal temperature sensor | Pt100 |
| Sensor external connection | Pt100 |
| Interface digital | Ethernet, USB (Host u. Device), RS232 |
| digital input | ECS ONE |
| digital output | POKO ONE |
| Alarm message | optic, acoustic, relay |
| Safety classification | III / FL |
| Heating power | 1,5 kW |
| Cooling power with | Thermooil |
| at 200°C | 0,6 kW |
| at 150°C | 0,6 kW |
| at 100°C | 0,6 kW |
| at 50°C | 0,6 kW |
| at 20°C | 0,6 kW |
| Cooling power with | Ethanol |
| at 0°C | 0,6 kW |
| at -20°C | 0,35 kW |
| at -30°C | 0,2 kW |
| at -40°C | 0,04 kW |
| Refrigeration machine | air-cooled, natural refrigerant |
| Refrigerant (ASHRAE, GHS) | R-290 (A3, H220) |
| Global Warming Potential (GWP) | 0,02 |
| UN-number | UN 3358 |
| Circulation pump: | |
| max. delivery | 47 l/min |

**Order-No.: 1041.0019.01**

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| | |
|---|---|
| max. delivery pressure | 0,9 bar |
| Pump connection | M24x1,5 male |
| max. permissible kin. viscosity | 50 mm²/s |
| min. filling capacity | 1,5 l |
| Overall dimensions WxDxH ** | 295x530x570 mm |
| Power supply requirement | 110-120V 1~ 60Hz |
| Degree of Protection | IP20 |
| min. ambient temperature | 5 °C |
| max. ambient temperature | 40 °C |

**from Serial-No.:** **1.0/25**

Technical details and dimensions are subject to change. No liability is accepted for errors or omissions. Illustrations can deviate from the original.

Included Accessories:
mini-USB cable #54949, E-grade "Professional" #9496, Adaptor M16x1 male to M24x1,5 female, hose connection for ,

Optional accessories:
E-grade "Explore" #10495, external sensor, temperature control / - connection hoses, heat transfer fluid, SpyLight-Software, Com.G@te, further accessories, etc.: see catalog.

Note: Pump connections: Bore shape Y (60°) according to DIN 3863, pipework/flexible tempering hoses: Ball socket according to DIN 3863, sleeve nut according to DIN 3870.

Output data valid for: Room temperature 20°C, cooling water inlet °C and bar differential pressure between cooling water inlet and - outlet. This temperature control unit is designed to operate with cooling water intake temperature between 5°C and 20°C. When cooling water temperatures fall below the condensation point, it is essential to insulate the cooling water pipes in the unit.
As the cooling water temperature increases, drop in the cooling power should be expected, and also an increased cooling water flow rate possible. Materiels used in the cooling water circuit include; copper, Stainless steel 1.4401, MS, PA, PPE, PTFE and EPDM. Please use suitable cooling water.

in accordance with EN60034-1 the following voltage and frequency tolerances are valid:
Voltage + / - 5% with a simultaneous frequency tolerance of + / - 2%
Example -5% voltage and +2% frequency -> not allowed!
-5% voltage and - 2% frequency -> allowed

Information to Electromagnetic compatibility:
Classification (disturbance) to EN55011: Class A, Group 1

Standard delivery conditions - Power cable configuration:
1. Single / two-phase devices (100V to 240V) --> with power cable and country-specific plug (please specify when ordering)
2. Three-phase devices with current consumption less than 63A --> with cable, without plug
3. Three-phase devices with current consumption greater than 63A --> without cable, without plug

This equipment is compliant to US-SNAP and all applicable EU laws. The US-SNAP end-use for this equipment is the industrial process refrigeration. Certification by a Notified Body upon request.

** Please respect space requirements. See operating conditions at www.huber-online.com